

### **ABSTRACT OF THE DISCLOSURE**

A method and system for mapping anatomical connection and signaling across a multiplicity of channels, channel contents, and channel speed. In particular, the anatomical connection and signaling is mapped in relation to the human brain. Constructs a three-dimensional, dynamically structured, active model, for general or individual patterns. Uses for the present invention include: risk reduction in surgery to significant channels; planning cell insertion at sites where they can be expected to migrate to a less reachable target site; guiding searches for metastatic tumors; indirectly localizing brain structures; constructing models of disease in which multiple sites are involved in the deficit and any proposed repair; and building simulation of normal processes which require the sequential interaction of multiple sites.

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